

CLAIMS

What is claimed is:

1           1.     A method of selecting an access network from among  
2 one or more access networks capable of providing service to  
3 a mobile communication station, the method comprising:

4                 receiving a request for access to an access network,  
5 said request including at least one service requirement;

6                 determining an availability of each of at least one  
7 access network based on said at least one service requirement;

8                 selecting, based on one or more user preferences,  
9 an access network determined to be available from said at  
10 least one access network; and

11                accessing said selected access network.

1           2.     The method according to claim 1, further comprising  
2 selecting a service type in said selected access network based  
3 on said user preferences.

1           3.     The method according to claim 1, further comprising  
2 retrieving said user preferences from a user profile stored  
3 in said mobile communication station.

1           4.    The method according to claim 1, further comprising  
2    retrieving said user preferences from a subscriber  
3    identification module.

1           5.    The method according to claim 1, further comprising  
2    manually entering said user preferences via a man-machine  
3    interface.

1           6.    The method according to claim 1, wherein said user  
2    preferences include a lowest service cost.

1           7.    The method according to claim 1, wherein said user  
2    preferences include a minimum power consumption.

1           8.    The method according to claim 1, wherein said  
2    determining step includes continuously scanning a broadcast  
3    pilot signal from each access network.

1           9.    The method according to claim 1, wherein said  
2    determining step includes estimating a status of said mobile  
3    communication station within each access network.

1           10. The method according to claim 1, wherein said at  
2           least one service requirement includes a bit rate requirement.

1           11. The method according to claim 1, wherein said at  
2           least one service requirement includes a maximum transfer  
3           delay.

1           12. The method according to claim 1, wherein said at  
2           least one service requirement includes a maximum frame error  
3           rate.

1           13. A mobile communication station capable of accessing  
2 multiple access networks, comprising:

3           a transceiver capable of sending and receiving radio  
4 signals to and from said multiple access networks; and

5           a processing unit connected to said transceiver and  
6 capable of executing a software program, said software program  
7 configured to:

8           receive a request to access an access network  
9 from an application executed by said processing  
10 unit, said request including at least one service  
11 requirement;

12           determine an availability of each access  
13 network based on said at least one service  
14 requirement; and

15           select an access network from said available  
16 access networks based on one or more user  
17 preferences.

1           14. The mobile communication station according to  
2 claim 13, wherein said software program is further configured  
3 to report said access network selection information to said  
4 application.

1           15. The mobile communication station according to  
2 claim 13, wherein said software program is further configured  
3 to select a service type in said selected access network based  
4 on said user preferences.

1           16. The mobile communication station according to  
2 claim 13, wherein said software program is further configured  
3 to retrieve said user preferences from a user profile stored  
4 in said mobile communication station.

1           17. The mobile communication station according to  
2 claim 13, wherein said software program is further configured  
3 to retrieve said user preferences from a subscriber  
4 identification module.

1           18. The mobile communication station according to  
2 claim 13, wherein said software program is further configured  
3 to accept manually entered user preferences via a man-machine  
4 interface.

1           19. The mobile communication station according to  
2 claim 13, wherein said user preferences include a lowest  
3 service cost.  
4

1           20. The mobile communication station according to  
2 claim 13, wherein said user preferences include a minimum  
3 power consumption.  
4

1           21. The mobile communication station according to  
2 claim 13, wherein said software program is configured to allow  
3 said application to select an access network based on said  
4 availability of said access networks.

1           22. The mobile communication station according to  
2 claim 13, wherein said software program is configured to  
3 continuously monitor a broadcast pilot signal from each access  
4 network to determine said access network availability.

1           23. The mobile communication station according to  
2 claim 13, wherein said software program is configured to  
3 estimate a status of said mobile communication station within  
4 each access network to determine said access network  
5 availability.

1           24. The mobile communication station according to  
2 claim 13, wherein said at least one service requirement  
3 includes a bit rate requirement.

1           25. The mobile communication station according to  
2 claim 13, wherein said at least one service requirement  
3 includes a maximum transfer delay.

1           26. The mobile communication station according to  
2 claim 13, wherein said at least one service requirement  
3 includes a maximum frame error rate.